OSO Accu 50R

Montasje, bruksanvisning og reservedeler for 50R, RE, RC & RCE s.2

User manual and spare parts for series 50R, RE, RC and RCE p.5



145026-03 50R 01-2014

MADE IN NORWAY

Installert av / Installed by:

Aut. rørlegger/Plumber: ______________________ Tel.: __________ Dato/date: ______

Aut. elektriker/Electrician: ______________________ Tel.: __________ Dato/date: ______

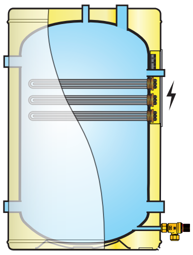
Bruker er informert og mottar denne anvisning / User is informed and handed this document: Dato/date: ______

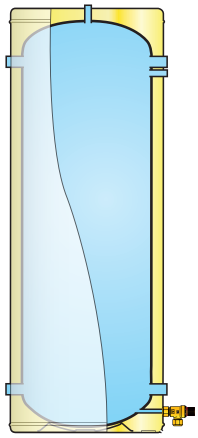
OSO Accu 50-serie - varianter

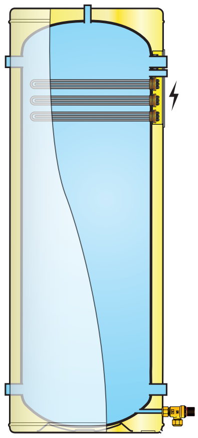
Akkumulatortanken øker gangtiden for varmepumpen, og bedrer dermed effektiviteten og levetiden. Varianter med el. ettervarmer kan også benyttes som en frittstående varmekilde, f.eks. i kombinasjon med OSO FIX MX pumpesentral (be om egen brosjyre eller se www.oso.no). Alle 50-serie er godkjent for 10 bar trykk.

Accu 50R - akkumulatortank uten el. ettervarming
Beregnet for akkumulering for varmepumpe.
100 l.: 4x1" tur/retur anslutninger (oppe/nede).
300 l.: 4x5/4" tur/retur anslutninger (oppe/nede).
1 stk. ø22 mm toppstuss for lufting samt en ø15mm avtapningsstuss nede i front. 1/2" følerlomme i siden oppe.
Sikkerhetsventil 3 bar fabrikkmontert.
Leveres i volum 100 og 300 liter. Tekniske data, se tabell.

Accu 50RE - akkumulatortank med el. ettervarmer
Beregnet for akkumulering for varmepumpe, med elektrisk ettervarming. Anslutninger som 50R (over), se også tabell nederst på siden. Sikkerhetsventil 3 bar fabrikkmontert.
Leveres i volum 50, 100 og 300 l.


50RE 50


50R 100/300

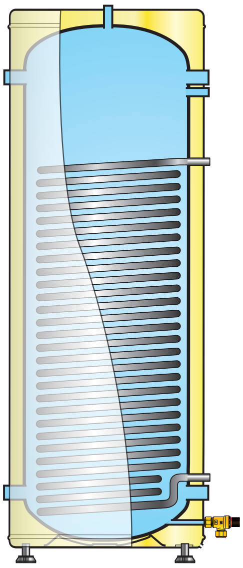

50RE 100/300

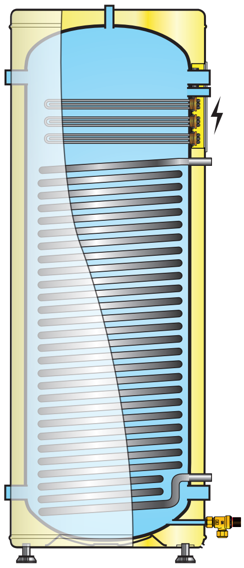
Accu 50RC og RCE - akkumulator med coil og el. ettervarmer
Beregnet for akkumulering for varmepumpe. Innebygget, rustfri coil og el. ettervarmer (kun RCE) fabrikkmontert.
Anslutninger som 50R (over), se også tabell nederst på siden.
Coilanslutning 3/4" tur/ret.
Sikkerhetsventil 3 bar fabrikkmontert.
Leveres i volum 100 og 300 l. (RC kun 300 l.)

Isolasjon
Alle er isolert med 40 mm miljøvennlig mineralull (Glava) kledd med epoxylakkert, hvit stålmantel.

El-sentraler
50RE og 50RCE er utstyrt med en el-sentral for ettervarming plassert høyt oppe i tanken. 50 & 100 l. volum har 9 kW (3x3) sentral, mens 300 l. volum har 15 kW (3x5) sentral montert.
For mer info om el-sentraler og koblingsskjemaer se side 3.

10 års garanti
Trykktanken i rustfritt stål har hele 10 års garanti mot materialeller produksjonsfeil. El/utstyr og ventiler har 2 års garanti. Berederen avgir ingen skadelige utslipp hverken i drift eller under produksjonen, og hele produktet kan resirkuleres 100%.


50RC 300


50RCE 100/300

Reservedeler

Prod. navn	Type	Beskrivelse	NRF varenr.
RGK 1" - 3 kW	Element, kort	For RE 50 og 100, RCE 100	801 5042
RG 1" - 5 kW	Element standard	For RE 300 og RCE 300	801 5012
TSL 30-60°C	Termostat, preset 45°C	For alle	801 5892
SV 3 bar	Sikkerhetsventil	For alle	840 5007

Tekniske data

Best. nr. ca. l. - kW	Passer for	Dia x H mm	Ansl. tur/ret.	Ansl. avt.	Ansl. coil	Føler-lomme	Ansl. lufting	Volum	Vekt	M³	NRF nr.
50R 100	Akk. for vp	ø430 x 1210H	4x1"	ø15 mm		1/2"	ø22 mm	100 l.	20 kg	0,24	801.1205
50R 300	Akk. for vp	ø580 x 1650H	4x5/4"	ø15 mm		1/2"	ø22 mm	287 l.	53 kg	0,58	801.1203
50RE 50 - 9 kW (3x3)	Varmeakk. m/el	ø430 x 680H	4x1"	ø15 mm		1/2"	ø22 mm	50 l.	17 kg	0,16	801.1199
50RE 100 - 9 kW (3x3)	Varmeakk. m/el	ø430 x 1210H	4x1"	ø15 mm		1/2"	ø22 mm	100 l.	22 kg	0,24	801.1201
50RE 300 - 15 kW (3x5)	Varmeakk. m/el	ø580 x 1650H	4x5/4"	ø15 mm		1/2"	ø22 mm	287 l.	63 kg	0,58	801.1281
50RC 300 - coil 2,6m²	Varmeakk. m/coil	ø580 x 1650H	4x5/4"	ø15 mm	3/4"	1/2"	ø22 mm	287 l.	70 kg	0,58	801.1182
50RCE 100 - 9kW+coil 0,7m²	Varmeakk. el+coil	ø430 x 1210H	4x1"	ø15 mm	3/4"	1/2"	ø22 mm	100 l.	27 kg	0,24	801.1311
50RCE 300 - 15kW+coil 2,6m²	Varmeakk. el+coil	ø580 x 1650H	4x5/4"	ø15 mm	3/4"	1/2"	ø22 mm	287 l.	72 kg	0,58	801.1312

Utpakking og installasjon

NB: Les bruksanvisningen før berederen fylles!

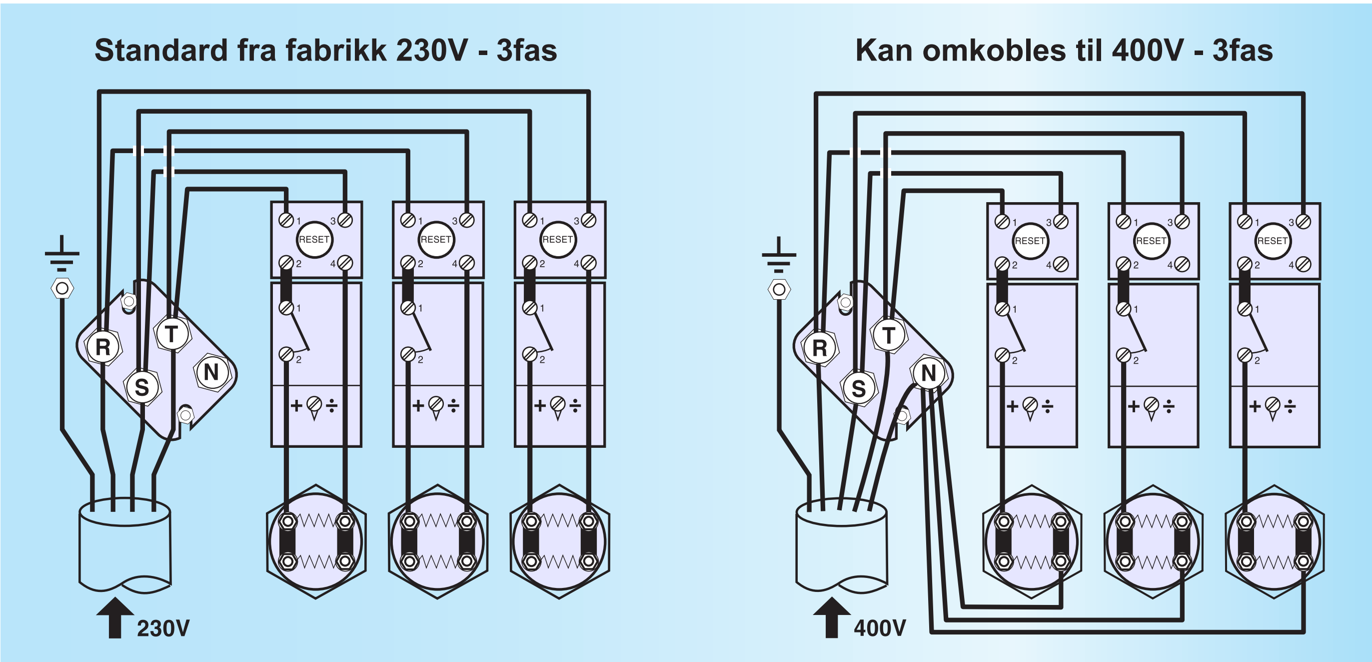
Inntransport og utpakking
Legg berederen på rygg. Fjern emballasjen. Sikkerhetsventil 3 bar er fabrikkmontert på ø15 mm stuss nede.

Oppstilling og rørtilkobling
Berederen monteres i lodd og vater, benytt medfølgende justerbare ben. 50 & 100 l. **er ikke utstyrt med stillben**, men kan evt. henges på vegg, benytt medfølgende veggbrakett. Rør- og el-montasje anbefales utført av autorisert installatør. Anslutningsdimensjoner: Se tabell på side 2. Det anbefales at produktet monteres i rom med sluk.
NB: Fyll tanken med vann før strøm settes på (gjelder RE og RCE-modellene), ellers bortfaller garantien. Ved fylling luftes tanken via ø22 mm luftestuss i toppen.

El-montasje
All tilkobling og arbeid med elektriske komponenter skal utføres av autorisert elektriker. Gjeldende verson av NEK 400 skal følges ved installasjon. Alle kabler til produktet skal monteres med passende og godkjent strekk-avlaster. Se også elkoblingsskjema nedenfor. NB: Fyll alltid vann før strøm settes på, ellers bortfaller garantien.

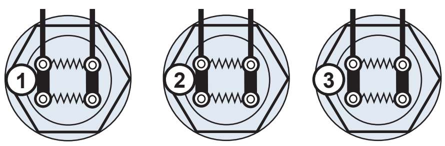
Årlig kontroll - etterkontroll
Når anlegget er ferdig montert, sjekk at alle koblinger er tette. Gjenta etter ca. 1 ukes drift. Sjekk deretter årlig.
Sikkerhetsventilens funksjon skal testes årlig ved å åpne ventilen og kontrollere at vannet renner fritt. Vri rattet mot klokken til vannet flommer, steng ved å vri videre mot klokken til ventilen stenger.
NB: Sikkerhetsventilers utløp må ALDRI plugges eller blokkeres!
El-kontroll: Steng strømtilførselen, demontér el-lokk og ettertrekk alle koblinger. Sjekk ledninger for skader og mangler. Montér el-lokket igjen før strømmen settes på.
Ved skade på ledninger eller elektriske komponenter, kontakt autorisert elektriker og bytt ut med originale reservedeler.

El-kobling



Alle interne ledninger er ferdig koblet fra fabrikk. Om ønskelig kan effekten reduseres ved å klippe/fjerne lasker på elementene, se nedenfor. *All tilkobling og arbeid med elektriske komponenter skal utføres av autorisert elektriker.*

Valgfri tilkobling av effekt

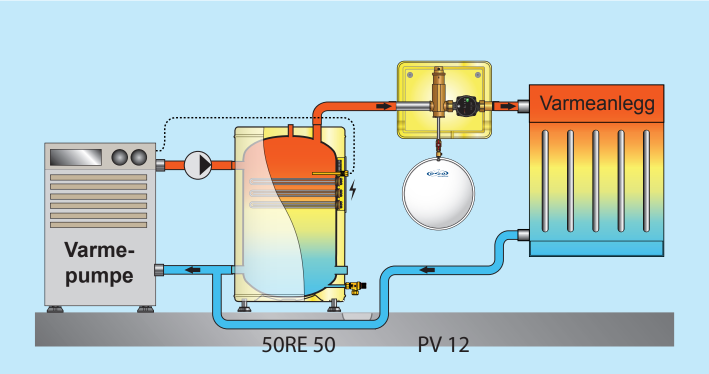


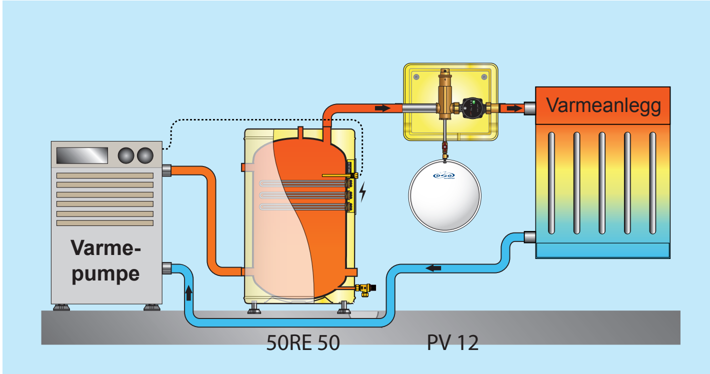
Fabrikkmontert	→ 9,0 kW	15,0 kW
Fjern lask ①	→ 7,5 kW	12,5 kW
Fjern lask ① + ②	→ 6,0 kW	10,0 kW
Fjern lask ① + ② + ③	→ 4,5 kW	7,5 kW
El-tilførsel kun til kolbe ①	→ 3,0 kW	5,0 kW
Fjern lask ① 230V 1-f.	→ 1,5 kW	2,5 kW

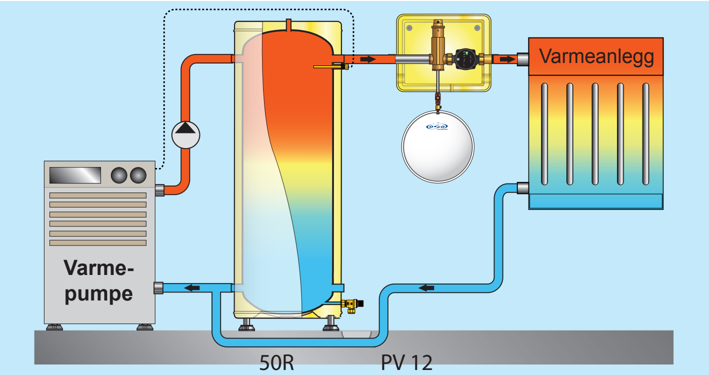
⚠ VIKTIG ⚠

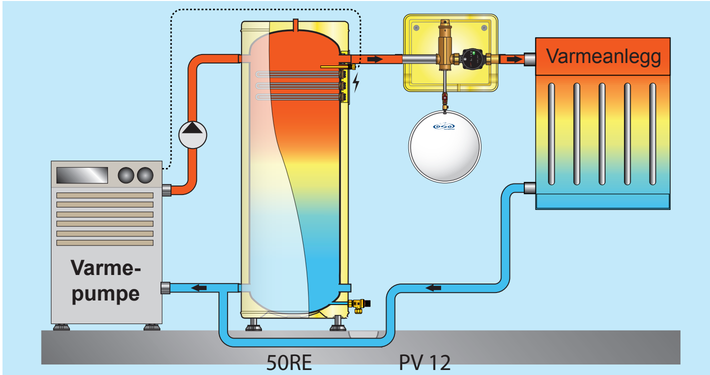
Ved elektrisk tilkobling av varmtvannsbereder skal gjeldende versjon av NEK 400 følges - ved nyinstallasjon av bereder med 2 kW eller høyere må autorisert elektriker sørge for fast montasje.

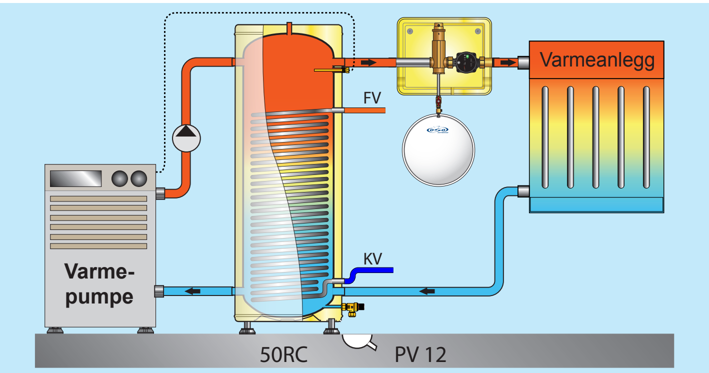
Koblingsforslag

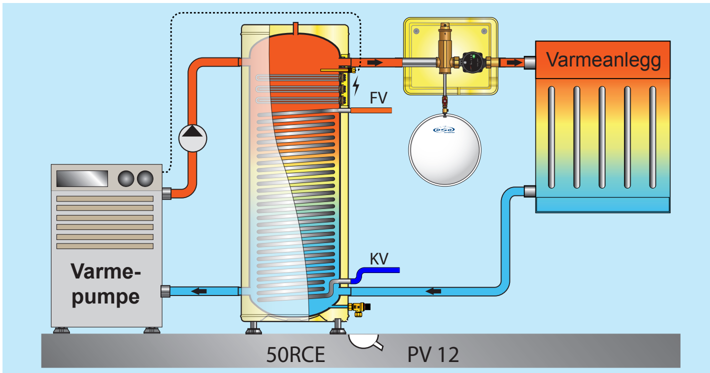




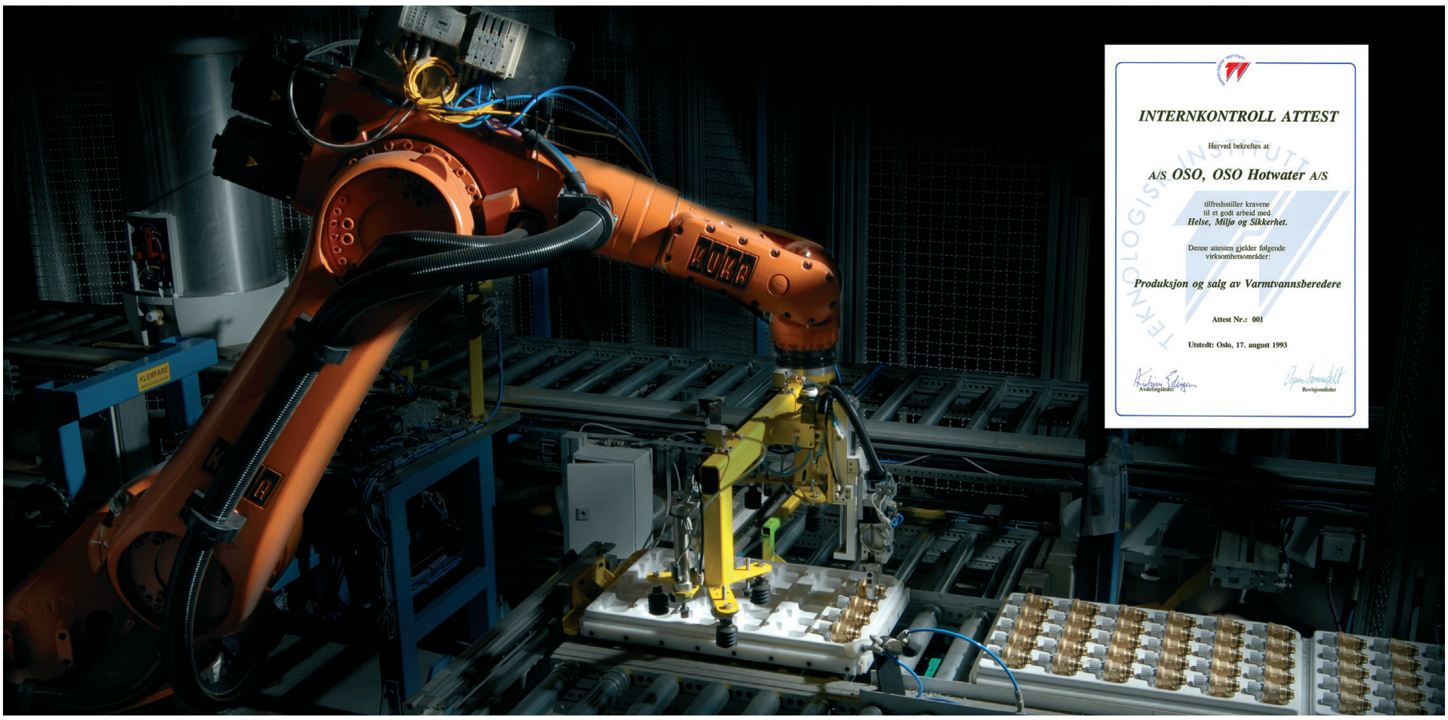








OSO Accu 50-serie kan benyttes i en rekke forskjellige koblinger. Vist over er noen eksempler på koblingsskisser.



OSO 50-series - models

The buffer vessel reduces heat pump cycling, thus improving both the efficiency and the lifespan. Models with electric reheater elements can also be used as a separate heat source, for instance in combination with the OSO FIX MX control centre. All 50-series are designed for up to 10 bar water pressure.

50R - buffer vessel without electric reheater
Suited for heat accumulation from heat pump.
100 l.: 4x1" flow/return connections (top/bottom).
300 l.: 4x5/4" flow/return connections (top/bottom).
A ø22 mm breathing end piece on top in addition to a ø15mm drain near the bottom. A 1/2" sensor pocket is fitted near the top. Safety valve 3 bar factory fitted.
Supplied as 100 and 300 litres units. Technical data, see table below.

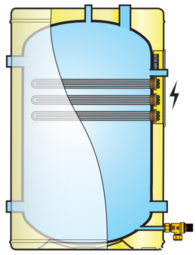
50RE - buffer vessel with electric reheater
Suited for heat accumulation from heat pump with electric reheating. Connections are the same as 50R (above).
Safety valve 3 bar factory fitted.
Supplied as 50, 100 and 300 litres units. Technical data, see table below.

50RC and RCE - buffer vessel with built-in coil and electric reheater
Suited for heat accumulation from heat pump. Built-in stainless steel coil, electric reheater elements (RCE only) factory fitted. Connections are the same as 50R (above). Safety valve 3 bar factory fitted. Supplied as 100 and 300 litres units (RC only 300). Technical data, see table below.

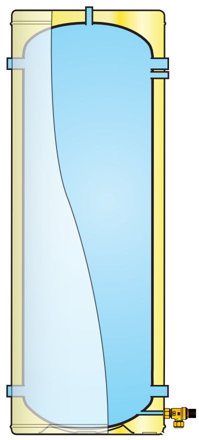
Insulation
All units are insulated by 40 mm mineral wool covered by a white, epoxy coated steel outer jacket.

Electric element banks
50RE and 50RCE are equipped with an electric reheater element bank near the top of the vessel. the 50 and 100 litres units is fitted with a 9 kW (3x3) element bank, while the 300 litres unit is fitted with a 15 kW (3x5) element bank. More info regarding element banks on page 6.

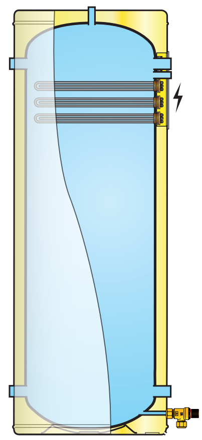
10 year warranty
The stainless steel pressure vessel has a 10 year warranty, remaining parts 2 years. The product is 100% recyclable.



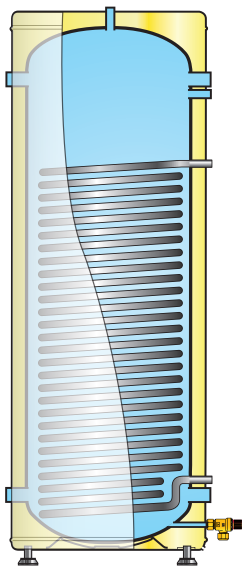
50RE 50



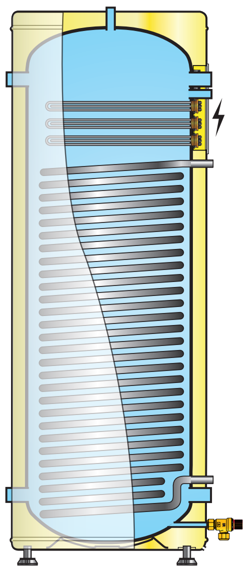
50R 100/300



50RE 100/300



50RC 300



50RCE 100/300

Spare parts

Prod. name	Type	Description	Part no.
RGK 1" - 3 kW	Electric element, short	For RE 50 and 100, RCE 100	801 5042
RG 1" - 5 kW	Electric element, standard	For RE 300 and RCE 300	801 5012
TSL 30-60°C	Thermostat, preset 45°C	For all units	801 5892
SV 3 bar	Safety valve	For all units	840 5007

Technical data

Prod. name - vol. - kW	Suited for	Diam. x H mm	Conn. flow/ret.	Conn. drain	Conn. coil	Sensor pocket	Top conn.	Volume	Weight	M³	Prod. no.
50R 100	Storage for hp	ø430 x 1210H	4x1"	ø15 mm		1/2"	ø22 mm	100 l.	20 kg	0,24	801.1205
50R 300	Storage for hp	ø580 x 1650H	4x5/4"	ø15 mm		1/2"	ø22 mm	287 l.	53 kg	0,58	801.1203
50RE 50 - 9 kW (3x3)	Heat storage w/el.	ø430 x 680H	4x1"	ø15 mm		1/2"	ø22 mm	50 l.	17 kg	0,16	801.1199
50RE 100 - 9 kW (3x3)	Heat storage w/el.	ø430 x 1210H	4x1"	ø15 mm		1/2"	ø22 mm	100 l.	22 kg	0,24	801.1201
50RE 300 - 15 kW (3x5)	Heat storage w/el.	ø580 x 1650H	4x5/4"	ø15 mm		1/2"	ø22 mm	287 l.	63 kg	0,58	801.1281
50RC 300 - coil 2,6m²	Heat storage w/coil	ø580 x 1650H	4x5/4"	ø15 mm	3/4"	1/2"	ø22 mm	287 l.	70 kg	0,58	801.1182
50RCE 100 - 9kW+coil 0,7m²	Heat storage w/coil+el	ø430 x 1210H	4x1"	ø15 mm	3/4"	1/2"	ø22 mm	100 l.	27 kg	0,24	801.1311
50RCE 300 - 15kW+coil 2,6m²	Heat storage w/coil+el	ø580 x 1650H	4x5/4"	ø15 mm	3/4"	1/2"	ø22 mm	287 l.	72 kg	0,58	801.1312

Unpacking and installation

Important: Read instructions before filling the unit!

Unpacking

Place unit on its back. Remove cardboard box. Safety valve 3 bar is factory fitted to ø15 mm connection near the bottom.

Installation and pipe fitting

Place the unit upright and level. Use supplied adjustable feet. the 50 and 100 l. units **are NOT fitted with adjustable feet, but** can be fitted to a wall, wall bracket is supplied. All pipe fitting and electrical connection must be done by authorized installer. Connection dimensions: See table on previous page. An overflow pipe should be connected to the expansion valve. Important: Fill the vessel with water before connecting electrical power (RE and RCE models). Otherwie the guarantee is void- When filling water breathe the vessel through the ø22 connection on top of unit.

Electrical connection

All connection and service to the electrical components in this product (RE and RCE models) is to be performed by an authorized electrician. All electric cables going into this product must be fitted with an approved cord ancorage. Always fill unit with water before connecting the power supply.

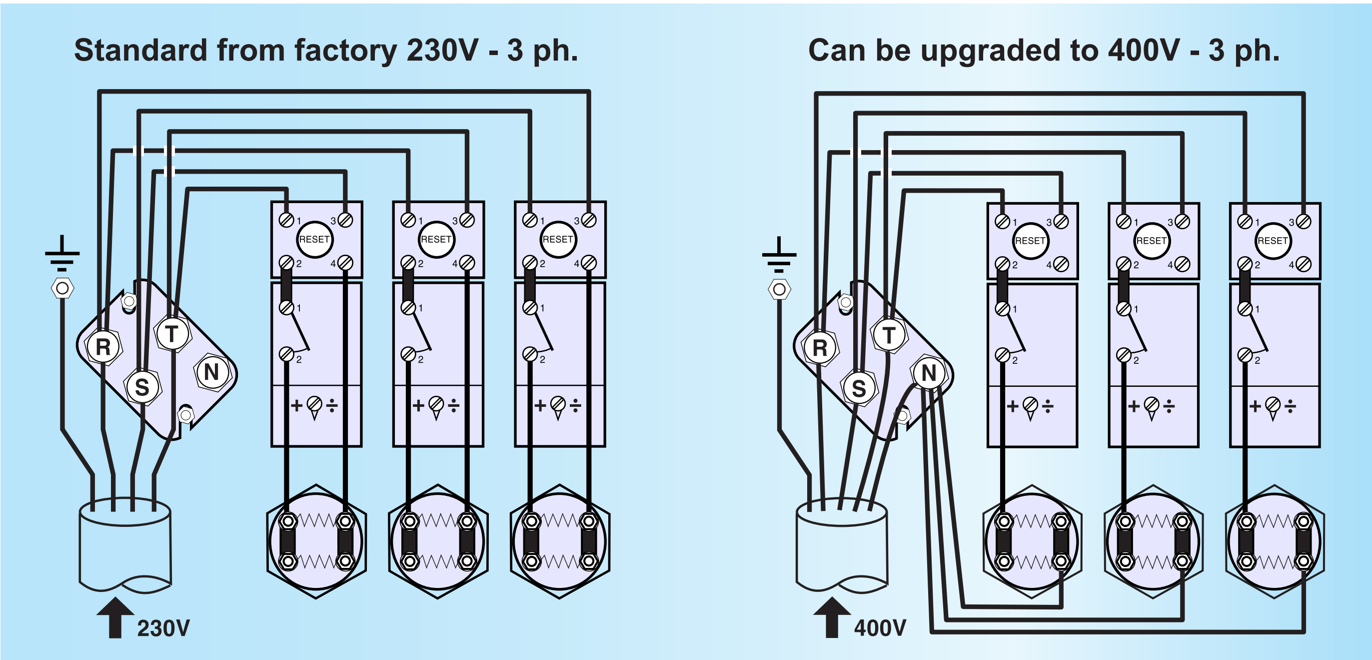
Annual check-up

When the system is installed, check all connections for leaks. Repeat after approx. one week in service, then check annually. The function of the safety valve must be checked annually by opening the valve to ensure water flows freely. Turn knob on safety valve counterclockwise until water flows, continue counterclockwise until valve snaps shut.

Important: The safety valve outlet must never be plugged or blocked!

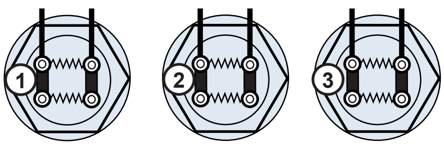
Electric service: Shut off power supply. Remove el. box lid and tighten all connections. Check electric cables for damage. Refit el. box lid before power supply is turned on. If any damage to electrical components is discovered, contact approved electrician and replace damaged parts with original spare parts.

Electrical connection



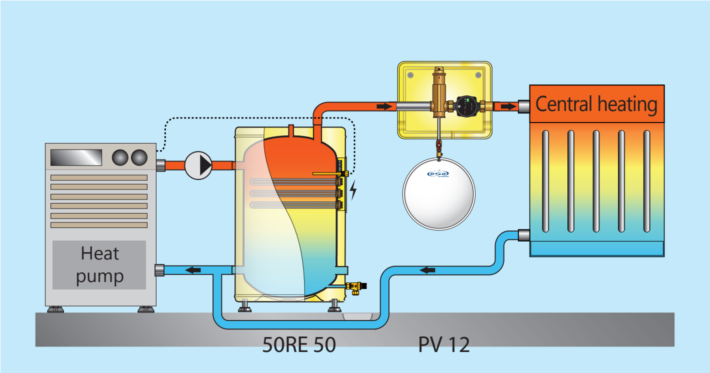
All internal wiring is factory fitted. If necessary the power output can be reduced by removing jumper(s) in accordance with the table below. *All service to electrical components is to be performed by authorized electrician.*

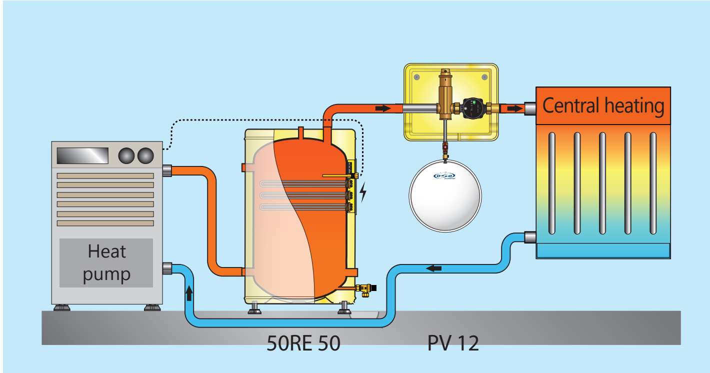
Selectable effect output

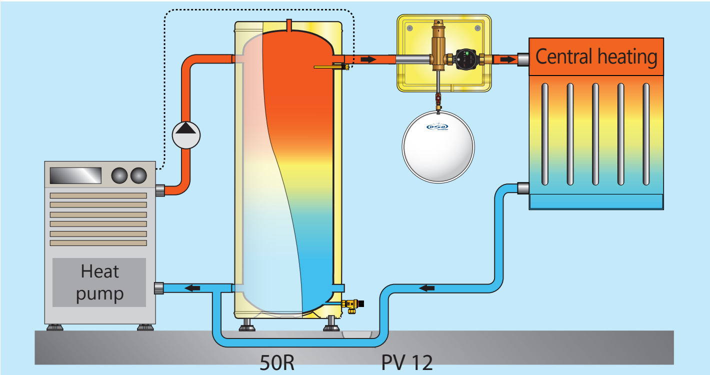


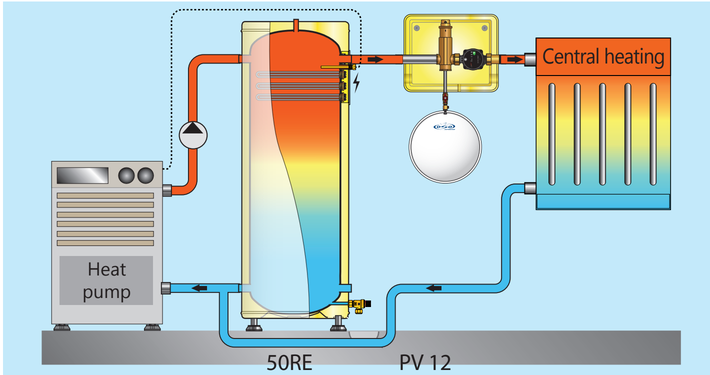
Factory fitted	→ **9,0 kW**	**15,0 kW**
Remove jumper ①	→ **7,5 kW**	**12,5 kW**
Remove jumper ① + ②	→ **6,0 kW**	**10,0 kW**
Remove jumper ① + ② + ③	→ **4,5 kW**	**7,5 kW**
Power supply only to element ①	→ **3,0 kW**	**5,0 kW**
Remove jumper ① 230V 1-ph.	→ **1,5 kW**	**2,5 kW**

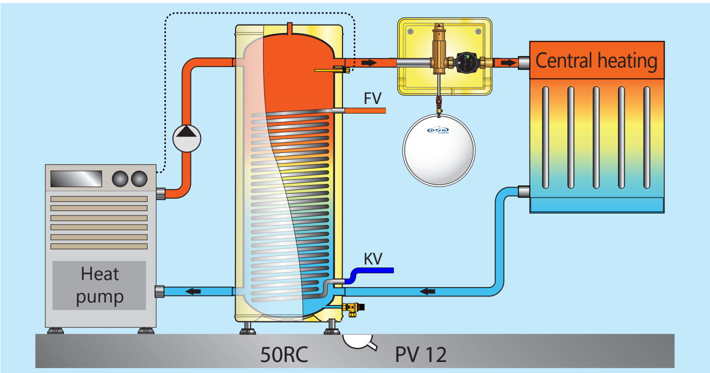
Installation suggestions

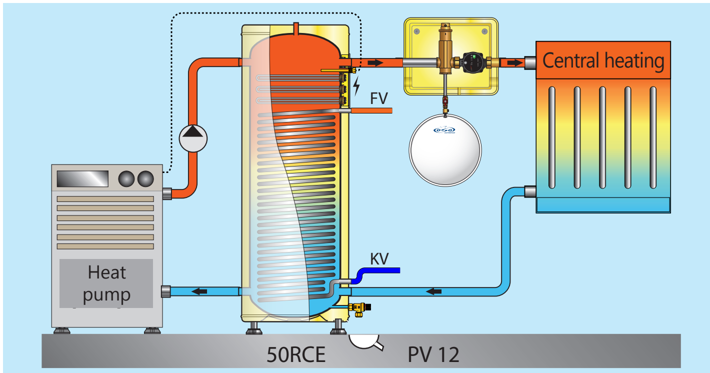




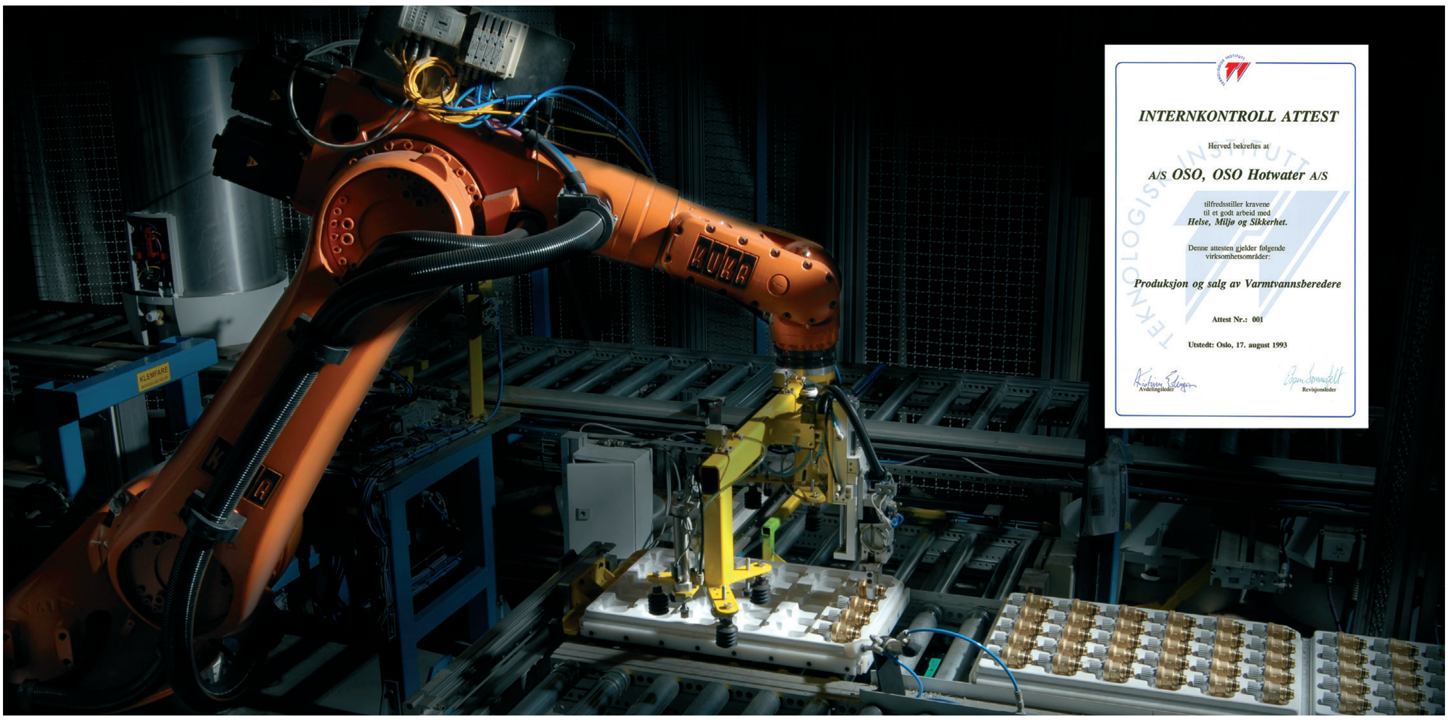








The OSO Accu 50-series can be fitted in many configurations. Above is shown a few examples.



Garantibestemmelser

Garanti
OSO rustfrie trykktanker garanteres fri for material- og/eller fabrikasjonsfeil i 10 år fra kjøpsdato.
El. / utstyr og ventiler garanteres i 2 år - OSO leverer ny eller reparert del fraktfritt til kunde, forutsatt at defekt del leveres fraktfritt OSO innen 2 uker.

Garantivilkår:
1. Ved salt-/kloridholdig vann over 50 mg. Cl./l., må anode monteres før vann påfylles. Ved salt-/kloridholdig vann over 250 mg. Cl./l., bortfaller garantien.
2. Montasje og service er forskriftsmessig utført (se montasjeanvisning), og vann påfylles før strøm tilkobles.
3. Dersom varmtvannsberederen ikke er i jevnlig bruk fra monteringstidspunkt, må den gjennomspyles med rent vann (åpne varmtvannskranen i minst 15 min.) minst én gang i uken de 4 første ukene etter installasjon.
4. Ved kalkholdig vann over 5dh, garanteres ikke el-kolben. Levetiden forlenges hvis termostat stilles på maks. 65°C, eller kalkoppløser monteres.
5. Feil grunnet feilaktig montasje / reparasjon, frost, overtrykk, overspenning, lynnedslag eller utsettelse for saltdannende prosesser, dekkes ikke av garantien.
6. Originale OSO reservedeler må benyttes. Laboratorievurdering av evt. skade kan bestilles.

MONTASJE - VIKTIG:
1. Berederen skal monteres i rom med sluk. Vannstopp-ventil med føler må ellers monteres.
2. Benkberedere skal i tillegg til pkt. 1 ha vanntett spillbakke og ha adkomst som sikrer tilgang til ventiler og elektrisk utstyr.
3. Inngående KV-trykk bør ha maxtrykk på 6 bar. Hvis høyere må trykkreduksjon-ventil monteres.
4. Sikkerhetsventilens overløpsrør skal være frostfritt, uavstengbart og minst 18 mm. innv., med fall til sluk.

NB: Følgeskadeansvar gjelder kun når dette er fulgt. OSO anbefaler at montering utføres av aut. rørlegger.

GENERELL BRUK - VIKTIG:
Dette apparat er ikke ment for bruk av personer (inkludert barn) med reduserte fysiske eller psykiske evner, eller mangel på erfaring og kjennskap til apparatet, med mindre de har blitt gitt instruksjoner eller opplæring vedrørende bruk av apparatet av en person som er ansvarlig for deres sikkerhet.
Barn bør observeres og instrueres til å ikke leke med apparatet.

Guarantee

Guarantee - Unvented hot water cylinder
The OSO stainless steel inner vessel is guaranteed against material defect or manufacturing faults for a period of 10 years from the date of purchase.
All other parts including, but not limited to factory fitted electrical elements (damage caused by lime scale excluded), thermostats and valves are guaranteed against material defects or manufacturing faults for 2 years from the date of purchase. In the event of a replacement component being required OSO Hotwater will supply such part(s) free of charge and freight paid, on condition that the defective component is delivered, fright paid to OSO Hotwater within 2 weeks of written notice being given to OSO Hotwater of the defect. Such replacement parts shall be guaranteed under the terms of this guarantee to the unexpired period of the aforementioned 2 year period.
This warranty is conditional upon the OSO cylinder being installed in compliance with the OSO Installation & Maintence Instructions, all current legislation, codes of practice and regulations governing the installation of unvented hot water cylinders in force at the date of installation and provided that:

1. The water supply to the cylinder shall be in accordance with European Council Directive 98/83 EC at the date of installation and not be fed from a private water supply. Pay special attention to:

Chloride content:	Max. 250 mg/l
Sulphate content:	Max. 250 mg/l
Combination Chloride/sulphate:	Max. 300 mg/l (in total)

2. The OSO cylinder is serviced and maintained every 12 months. Invoices for the maintenance work should be kept as proof of regular maintenance. Care should be taken of the invoices as they serve as the guarantee certificate for the cylinder.
3. The OSO cylinder is filled with water before turning the electricity supply on to the heater elements.
4. If the newly fitted water heater is not in regular use then it must be flushed through with fresh water for at least 15 minutes (open at least one hotwater tap) once per week, during a period of at least 4 weeks.
5. The mains water supply complies with EU standards current at the date of installation and is not fed with water from a private supply.
6. The OSO unvented cylinder has not been modified in any way other than by OSO Hotwater and is only used for the storage of potable water.
7. No factory fitted parts have been removed for unauthorised repair or replacement.
8. Defects caused by frost, excess pressure, salt dehardner process, trancient voltage, lightning strikes or incorrect installation, repair or use, are not covered by this warranty. A laboratory evaluation of possible defects can be ordered by the user, however the user must pay for this where the above mentioned conditions have not been fulfilled. Evidence of the purchase date and the date of supply must also be submitted with your claim.

This guarantee does not confer any rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This guarantee is offered as an extra benefit and does not affect your statutory rights as a consumer.

IMPORTANT WHEN FITTING UNIT:
1. The water heater should be installed in a room equipped with gully. Otherwise a water shut-off valve with sensor must be fitted.
2. Maximum cold water inlet pressure is 6 bar. A pressure reduction valve must be fitted if necessary.
3. The overflow pipe from the safety valve must have an inner diameter of at least 18 mm and must be led to a gully, at a declining angle if possible.

Please note: Manufacturer responsibility for any consequential damage only applies when the above statements has been followed. OSO recommends that the water heater is fitted by authorized personnell.

GENERAL USE - IMPORTANT:
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the appliance.

OSO HOTWATER AS / OSO HOTWATER EXPORT AS / OSO HOTWATER UK Ltd.

OSO Norway/Export: Industriveien 1, P.O. Box 112 - N-3300 Hokksund, Norway
OSO UK: E15 Marquis Court, Team Valley Trading Estate, Gateshead, Tyne & Wear, NE11 0RU - United Kingdom
Tel.: +47 32 25 00 00 • Fax: +47 32 25 00 90
N/EXP.: Web: www.oso.no / www.osohotwater.com • E-mail: oso@oso.no / export@osohotwater.com
UK: Web: www.osohotwater.co.uk - E-mail: sales.uk@oso-hotwater.co.uk - technical.uk@oso-hotwater.co.uk
UK tel.: Sales: 0191 482 0800 - Technical: 0191 482 7049 - Fax: 0191 491 3655